

We claim:

Sub. a3 1. A computer-aided group-learning system for more than one user to work on a
2 subject, the system comprising an interaction controller configured to
3 generate materials on the subject to communicate to one or more users for the one
4 or more users to work on the subject;
5 set a duration of time for users to communicate;
6 start a dialogue session for users to communicate in an area related to the subject;
7 and
8 stop the dialogue session approximately at or before the end of the duration of
9 time.

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2. A computer-aided group-learning system as recited in claim 1 wherein the
interaction controller monitors at least one user's inputs to the system.

2/3 3. A computer-aided group-learning system as recited in claim 1 further comprising
one or more interactive devices, with each interactive device configured for a user to
receive information from, and enter information into, the system.

Sub. a4 4. A computer-aided group-learning method for more than one user to work on a
2 subject, the method comprising the steps of:
3 generating materials on the subject to communicate to one or more users for the
4 one or more users to work on the subject;
5 setting a duration of time for users to communicate among themselves;
6 starting a dialogue session for users to communicate in an area related to the
7 subject; and
8 stopping the dialogue session approximately at or before the end of the duration of
9 time.

1 5. A computer-aided group-learning method as recited in claim 4 further comprising
2 the step of monitoring at least one user's inputs while working on the subject.

1 ¹⁸~~6~~. A computer-aided group-learning method as recited in claim ¹⁷~~4~~ further comprising
2 the step of tailoring the materials generated for at least one user to that user.

1 7. A computer-aided group-learning method as recited in claim 5 further comprising
2 the step of guiding the users' communication in the dialogue session back to the subject
3 when one or more users have been distracted from the subject for a duration of time.

1 8. A computer-aided group-learning method as recited in claim 4 wherein the mode
2 of communication can be selected from a unicast, multicast and broadcast mode.

1 ¹⁹~~9~~. A computer-aided group-learning method as recited in claim ¹⁷~~4~~ further comprising
2 the step of producing an answer to respond to a user's question.

1 ²⁰~~10~~. A computer-aided group-learning method as recited in claim ¹⁷~~4~~ further comprising
2 the step of generating materials for a user to individually work on the subject.

1 ²¹~~11~~. A computer-aided group-learning method as recited in claim ¹⁷~~4~~ wherein the
2 materials to be presented to at least one user can be in one or more formats to be selected
3 by the user.

1 ²²~~12~~. A computer-aided group-learning system as recited in claim ¹⁷~~4~~ further comprising
2 the step of restricting one user from communicating with any other users.

1 ²³~~13~~. A computer-aided group-learning method as recited in claim ¹⁷~~4~~ wherein the users
2 communicate orally.

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14. A computer-aided group-learning method as recited in claim 4 further comprising
2 the step of repeating from the step of generating after the step of stopping.

15. A computer-aided group-learning system as recited in claim 1 further comprising
2 an initializer configured to set the subject.

16. A computer-aided group-learning system as recited in claim 2 further comprising a
2 performance analyzer operatively coupled to the interaction controller for analyzing the
3 monitored inputs.

17. A computer-aided group-learning method as recited in claim 5 further comprising
2 the step of analyzing the monitored inputs.

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18. A computer-aided group-learning method as recited in claim 17 wherein the
2 analysis includes analyzing one or more users' performance on the subject.

19. A computer-aided group-learning method as recited in claim 17 wherein the
2 analysis includes analyzing a user's interaction in the dialogue session.

20. A computer-aided group-learning method as recited in claim 17 wherein the
2 analysis includes analyzing the relevancy of the user's inputs.

21. A computer-aided group-learning method as recited in claim 17 wherein the
2 analysis includes analyzing the approach the user asks questions.

22. A computer-aided group-learning method as recited in claim 20 wherein the
2 analysis includes analyzing if the user is disruptive.

23. A computer-aided group-learning method as recited in claim 19 wherein the
2 analysis includes analyzing if the user dominates the dialogue session.

1 24. A computer-aided group-learning method as recited in claim 19 wherein the
2 analysis includes analyzing the frequency of the user's inputs.

1 25. A computer-aided group-learning method as recited in claim 22 wherein the
2 analysis includes generating a dictionary of words based on the inputs of one or more
3 other users.

1 26. A computer-aided group-learning system for more than one user to work on a
2 subject, the system comprising:
3 an interaction controller configured to
4 generate materials on the subject to communicate to one or more users for
5 the one or more users to work on the subject;
6 set a duration of time for users to communicate in a dialogue session; and
7 monitor at least one user's inputs to the system; and
8 a performance analyzer operatively coupled to the interaction controller for
9 analyzing the monitored inputs;
10 wherein the materials generated for at least one user are tailored to that user based
11 on the monitored inputs.

1 27. A computer-aided group-learning system for more than one user to work on a
2 subject, the system comprising:
3 an interaction controller configured to
4 set a duration of time for users to communicate;
5 start a dialogue session for users to communicate in an area related to the
6 subject;
7 stop the dialogue session approximately at or before the end of the duration
8 of time; and
9 monitor at least one user's inputs to the system; and

10 a performance analyzer operatively coupled to the interaction controller for
11 analyzing the monitored inputs.

1 28. A computer-aided group-learning system as recited in claim 2 further comprising:
2 a recommendation generator coupled to the interaction controller for
3 recommending the actions of the interaction controller based on the inputs monitored; and
4 a report generator for generating reports on each user to show what the user
5 should work on.

1 29. A computer-aided group-learning method as recited in claim 5 further comprising
2 the steps of:
3 providing recommendation on generating materials for one or more users based on
4 the inputs monitored; and
5 generating reports on each user to show what the user should work on.

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~~30~~. A computer-aided group-learning system as recited in claim 1 further comprising a
2 user registry operatively coupled to the interaction controller for restricting the users who
3 can use the system to work on the subject.

1 31. A computer-aided group-learning method as recited in claim 4 further comprising
2 the step of restricting users who can work on the subject.

1 32. A computer-aided group-learning method as recited in claim 31 further comprising
2 the step of obtaining inputs from a potential user for determining whether the potential
3 user may be allowed to join the one or more existing users to work on the subject.

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~~33~~. A computer-aided group-learning method as recited in claim ³⁵~~32~~ wherein the
2 determination depends on inputs from one or more of the existing users, who can discuss
3 the determination in a dialogue session.

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1 ³⁷~~34~~. A computer-aided group-learning method as recited in claim ³⁴~~31~~ further comprising
2 the step of retrieving a summarized profile of the existing users for a potential user to
3 decide on joining the one or more existing users to work on the subject.

1 ³⁸~~35~~. A computer-aided group-learning method as recited in claim ³⁴~~31~~ further comprising
2 the step of allowing a potential user to interact with the one or more existing users in a
3 dialogue session for a pre-determined period of time for determining whether the potential
4 user might join the existing users to work on the subject.

1 ³⁹~~36~~. A computer-aided group-learning method as recited in claim ³⁴~~31~~ further comprising
2 the step of forbidding, in the future, an existing user from working on the subject with the
3 one or more other users.

1 ⁴⁰~~37~~. A computer-aided group-learning method as recited in claim ³⁹~~36~~ wherein the step
2 of forbidding depends on recommendations from the one or more other users.

1 ⁴¹~~38~~. A computer-aided group-learning method as recited in claim ³⁴~~31~~ further comprising
2 the step of limiting a user's interaction to observing but not interacting in the dialogue
3 session.

1 ⁴²~~39~~. A computer-aided group-learning method as recited in claim ³⁴~~31~~ further comprising
2 the step of suggesting a user to join another group of users to work on the subject.

Sub. 083 1 40. A computer-aided group-learning system for more than one user to work on a
2 subject, the system comprising:
3 a user registry for restricting the users who can use the system;
4 an interaction controller operatively coupled to the user registry, the controller
5 configured to
6 generate materials on the subject to communicate to the users who can use
7 the system to work on the subject;

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8 set a duration of time for users to communicate in a dialogue session; and
9 monitor at least one user's inputs to the system; and
10 a performance analyzer operatively coupled to the interaction controller for
11 analyzing the monitored inputs.

1 41. A computer-aided learning system comprising:
2 a user registry for restricting one or more users who can use the system to work
3 on the subject;
4 an interaction controller operatively coupled to the user registry, the interaction
5 controller configured to
6 generate materials on the subject for the one or more users who can use the
7 system to work on the subject; and
8 monitor at least one user's inputs to the system; and
9 a performance analyzer operatively coupled to the interaction controller for
10 analyzing the monitored inputs.

1 42. A computer-aided group-learning system as recited in claim 2 further comprising:
2 a performance analyzer operatively coupled to the interaction controller for
3 analyzing the monitored inputs to generate a profile of one or more users; and
4 a user-profile storage medium for storing the one or more users' profile.

1 ⁷/₄₃. A computer-aided group-learning system as recited in claim ⁶/₄₂ wherein the one or
2 more users' profile includes the performance of one or users' on the subject.

1 ⁸/₄₄. A computer-aided group-learning system as recited in claim ⁶/₄₂ wherein the one or
2 more users' profile includes the one or more users' input characteristics.

1 ⁹/₄₅. A computer-aided group-learning system as recited in claim ⁶/₄₂ wherein the user-
2 profile storage medium stores all of the users' communication in the dialogue session.

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2 46. A computer-aided group-learning system as recited in claim 42 wherein the user-
3 profile storage-medium is separated into a private and a public area, with the public area
4 storing information that can be accessed by any person.

1 47. A computer-aided group-learning method recited in claim 5 further comprising the
2 steps of:

3 analyzing the monitored inputs to generate a profile of one or more users; and
4 storing the one or more users' profile in a storage medium.

1 48. A computer-aided group-learning system for more than one user to work on a
2 subject, the system comprising:

3 an interaction controller configured to
4 generate materials on the subject to communicate to the users for them to
5 work on the subject;

6 set a duration of time for users to communicate in a dialogue session; and
7 monitor at least one user's inputs to the system;

8 a performance analyzer operatively coupled to the interaction controller for
9 analyzing the monitored inputs to generate a profile of one or more users; and
10 a user-profile storage medium for storing the one or more users' profile.

1 ¹¹/₄₉. A computer-aided group-learning system as recited in claim 1 further comprising a
2 notepad for a user to take notes.

1 ¹²/₅₀. A computer-aided group-learning system as recited in claim ¹¹/₄₉ wherein the system
2 is configured to allow the user to cut materials the user has received, and paste the
3 materials in the notepad.

1 ¹³/₅₁. A computer-aided group-learning system as recited in claim ¹¹/₄₉ wherein the system
2 is configured to allow the user to link the notes taken to the materials received by the user.

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1 ~~52~~ A computer-aided group-learning system as recited in claim ~~51~~¹³ wherein the link is
2 from an area in the notes to a point in the materials.

Sub. a¹⁰ 53. A computer-aided group-learning system as recited in claim 49 wherein the
2 interaction controller guides the user to take notes.

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1 ~~54~~ A computer-aided group-learning system as recited in claim ~~53~~¹⁵ wherein the
2 guidance depends on the user's inputs into the system.

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1 ~~55~~ A computer-aided group-learning method as recited in claim ~~4~~¹⁷ further comprising
2 the step of allocating an area to allow a user to take notes.

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1 ~~56~~ A computer-aided group-learning method as recited in claim ~~55~~⁴⁴ further comprising
2 the step of guiding the user to take notes.

Sub. a¹¹ 57. A computer-aided learning system comprising:
2 a notepad for a user to take notes while working on a subject through the system;
3 and
4 an interaction controller for generating materials on the subject for the user, and
5 for guiding the user to take notes.

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1 ~~58~~ A computer-aided learning system as recited in claim ~~57~~⁵¹ wherein the system is
2 configured to allow the user to cut materials the user has received, and paste the materials
3 in the notepad.

Sub. a¹² 59. A computer-aided learning system as recited in claim 57 wherein the system is
2 configured to allow the user to link the notes taken to the materials generated by the
3 generator on the subject.

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60. 1 A computer-aided group-learning system as recited in claim 59 wherein the link is
2 from an area in the notes to a point in the materials.

- Sub. a3y 61. 1 A computer-aided learning system as recited in claim 57 wherein:
2 the interaction controller is configured to monitor the user's inputs while the user
3 is working on the subject; and
4 the guidance depends on the monitored inputs.
62. 1 A computer-aided learning method comprising the steps of:
2 generating materials on a subject for a user;
3 allocating an area for a user to take notes; and
4 guiding the user to take notes.

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